

{ APRIL 16, 2013 }

 DESERET NEWS  
**ClassroomConnections**  
EDUCATION ■ COMMUNITY ■ FAMILY

INSIDE

Be prepared  
Know the facts

Protect yourself  
After the earthquake

# WHAT TO DO WHEN disaster strikes

**Join us** for Utah's largest earthquake drill on April 17, 2013. Government, volunteer and public safety agencies, schools and businesses will practice their emergency plans. Register your family to get preparedness and drill updates. The more we are prepared, the better we'll recover when the big one hits.

The Great  
Utah

**Shake  
Out**<sup>TM</sup>

April 17 @ 10:15 a.m.

[ShakeOut.org/utah](http://ShakeOut.org/utah)

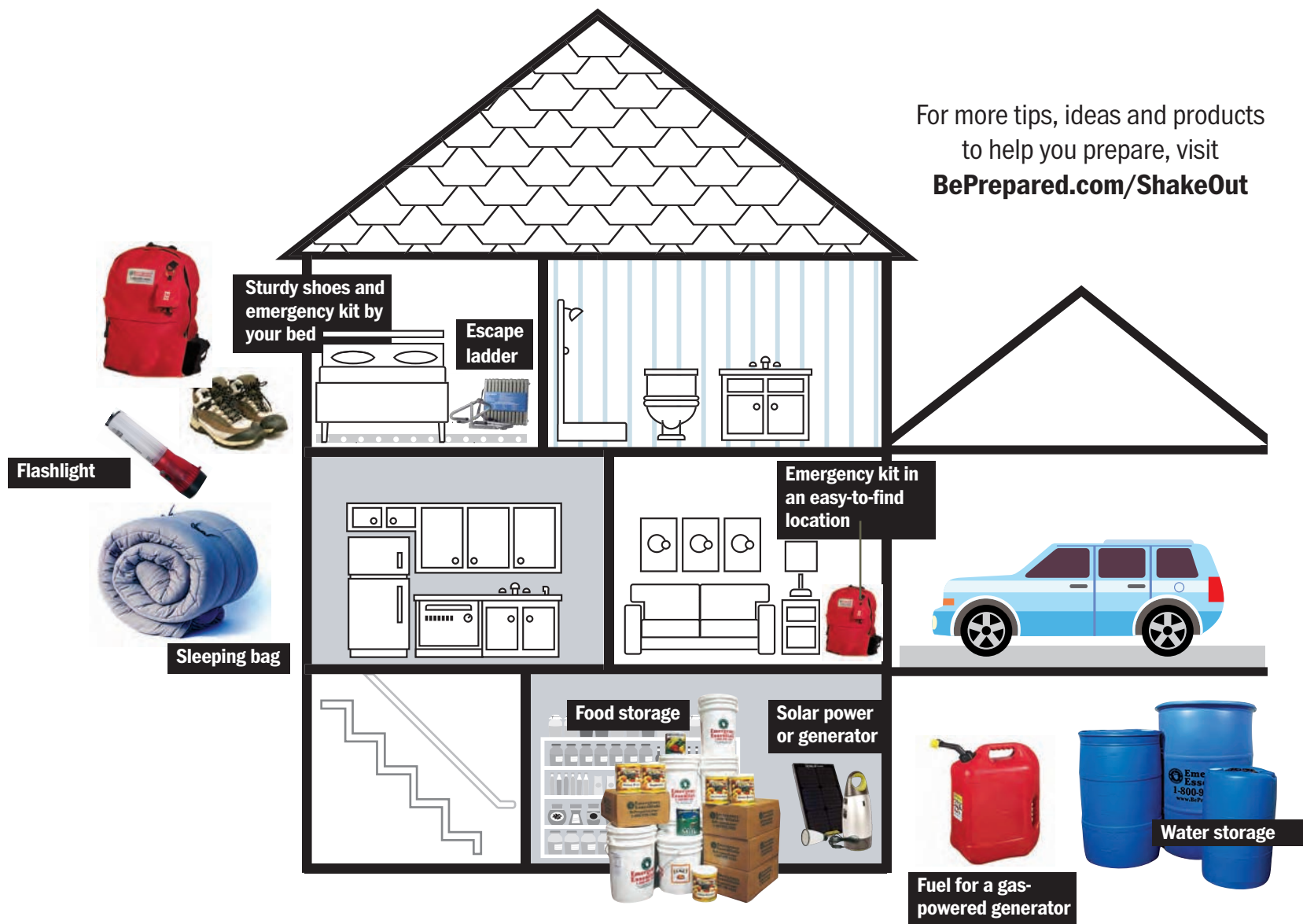


**Emergency  
Essentials®**  
[BePrepared.com](http://BePrepared.com)

Deseret News



For more tips, ideas and products  
to help you prepare, visit  
**BePrepared.com/ShakeOut**



## .....Earthquake preparedness

## quick reference .....



**If a 7.0 earthquake strikes Utah**  
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Visit [www.earthquakecountry.info/roots/seven\\_steps.html](http://www.earthquakecountry.info/roots/seven_steps.html) for tips on how to prepare, survive and recover.

# The Great Utah Shake Out™

**April 17 @ 10:15 a.m.**



A major earthquake happens on the Wasatch Front every 350 years. The last one: 350 years ago.

## The largest earthquake drill in Utah is tomorrow

If an actual magnitude 7.0 earthquake had struck today, you wouldn't be reading this. Unless you keep this piece in a safe place, it would be buried under the broken dishes, overturned furniture, spilled refrigerator contents and potentially crumbling walls of your home.

That's what a catastrophic earthquake does.

And that is just a small picture of what it would be like inside your home.

Shaking at that magnitude that lasts for just one minute in Salt Lake City would knock down about 10,000 buildings and cause \$70 billion in damage. More than 160 fires would start around the county, swiftly overwhelming the capacity of fire departments to respond. Roads and bridges would become impassible, not only making it nearly impossible to travel home, to school or to work, but also keeping firefighters, paramedics and police from getting to people who need help. The only help would come from people in your neighborhood.



Electricity and water would be out for weeks or months. Without refrigerators and freezers, food would rot and medicines would spoil. Anything that plugs in would be useless. About 2,300 people would die and 30,000 would be injured.

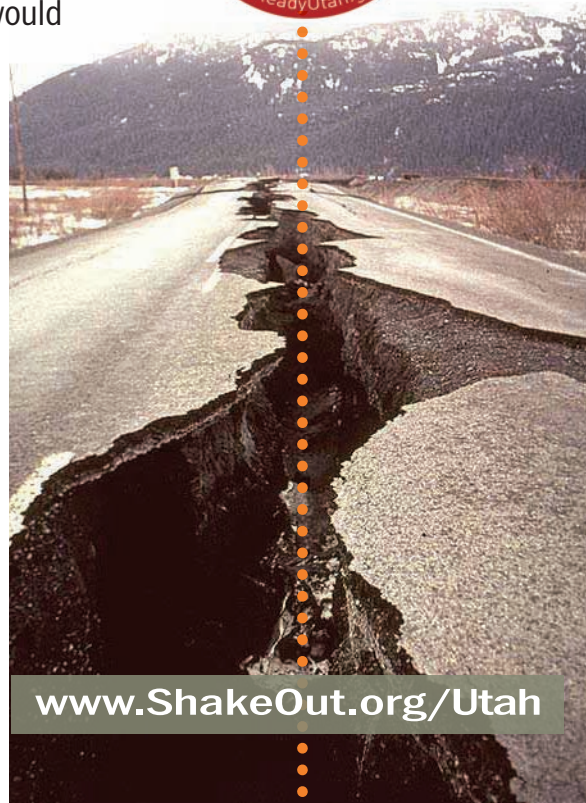
Hospitals would be damaged and overcrowded.

It would be our worst day.

Tomorrow is the Great Utah Shake-Out, the state's largest earthquake drill. Will you begin taking steps to prepare? Close to a million Utahns are expected to participate by conducting earthquake drills, reviewing their emergency plans and starting to build emergency kits. Join them.

Part of being prepared is knowing what to do after an earthquake. The next nine pages will help get you ready to respond.

After an earthquake, we need each other more than ever.



[www.ShakeOut.org/Utah](http://www.ShakeOut.org/Utah)



# Most of Utah's populated area lies within an active earthquake belt

## THE WASATCH FAULT

One of the longest and most active normal faults in the world, the 240-mile-long Wasatch fault runs north to south, from Malad City, Idaho to Fayette, Utah. The fault is subdivided into 10 segments averaging 25 miles in length; each segment is generally thought to rupture independently and is a separate source of large earthquakes.

Although scientists are unsure how many small- to moderate-size historical earthquakes can be attributed to slip on the Wasatch fault, the geologic record shows that numerous large (magnitude 6.5-7.5) surface-faulting earthquakes have taken place on the Wasatch fault over the past 10,000 years.



## Know the facts



Damage in Salt Lake City caused by the M 5.2 Magna earthquake of 1962. (Photo courtesy of Deseret News.)



Smaller photos: Damage caused by the M 5.7 Richmond (Cache Valley) earthquake of 1962 (top) and the M 6 Elsinore, Utah, earthquakes of 1921 (bottom).

(Photos courtesy of, respectively, Ariel D. Benson, Richmond, Utah, and the F. J. Pack Collection, Special Collections Department, University of Utah Libraries.)



## Earthquake risk increases as population increases.

Approximately 1.6 million people (about 80 percent of Utah's residents) live along the Wasatch Front. This close juxtaposition of a large active fault and a populous urban area contributes to the Wasatch Front's designation as having the greatest earthquake risk in the interior of the western United States.

The Wasatch fault traces predominantly along the base of the mountains near numerous Wasatch Front communities, many of which encroach on the fault. Land use along this prominent fault is variable and sometimes controversial. While escarpments provide attractive "foothills" locations for parks, trails and golf courses, they also furnish "view lots" for homes and convenient sites for water tanks, reservoirs and other facilities.

A fault is a break in the earth's crust along which blocks of earth slip past each other. This slipping is the earth's way of adjusting to the buildup of strain within its crust. Movement can be horizontal, vertical or both. The Wasatch fault is called a normal fault, because the slip is mostly vertical – the mountain block (Wasatch Range) moves upward relative to the adjacent downward-moving valley block. The Wasatch fault has the dubious distinction of being one of the longest and most active normal faults in the world.

**More than 75 percent of Utah's economy is concentrated in Salt Lake, Utah, Davis and Weber counties—above the Wasatch fault, which projects beneath the developed Wasatch Front valleys.**

**Most of Utah's state government facilities are located within 15 miles of the Wasatch fault.**

**Major interstate transportation corridors and the Salt Lake City International Airport are located within 15 miles of the Wasatch fault.**

**By 2030 the population in the Wasatch Front area is projected to grow to 2.8 million, a 50 percent increase over 2005.**

### Historical quakes of about magnitude (M) 5.5 and larger in the Utah region\*

1884	M 6	Bear Lake Valley
1887	M 5.5	Kanab
1900	M 5.5	Eureka
1901	M 6.5	Richfield
1902	M 6	Pine Valley
1909	M 6	Hansel Valley
1910	M 5.5	Salt Lake City
1914	M 5.5	Ogden
1921	M 6	Elsinore (two events)
1934	M 6.6	Hansel Valley
1959	M 5.7	Utah-Arizona Border
1962	M 5.7	Richmond
1966	M 6.0	Utah-Nevada Border
1975	M 6.0	Utah-Idaho Border
1992	M 5.9	St. George

\*sizes of shocks before 1934 are approximate



# Response of buildings to earthquakes

Much like an automobile on a winding roadway, buildings sway in response to earthquakes. Foundations connect structures to the ground and they play a very important role in determining how much force a building can resist. Engineers study this critical interface and may choose to “cushion” the effect by using special foundation designs.

**A building’s configuration and height also play an important role in determining the effects an earthquake will have on its performance.**

- Square or rectangular buildings typically perform better than irregular-shaped buildings.
- Tall buildings respond by swaying back and forth.
- Short structures are jarred from side to side as the earthquake releases its force at the ground surface.

**The materials from which a building is constructed help determine how it performs during an earthquake.**

- Steel and wood are considered flexible or “ductile” and tend to absorb the energy.
- Concrete and masonry are more “rigid” and can transfer the ground motion directly into the structure.

## ■ Unreinforced masonry buildings

One building type of particular concern in Utah is masonry constructed without steel reinforcement. **Unreinforced masonry buildings were popular when the state was first settled and continued to be built into the 1970s.**

Many residences, in addition to commercial buildings, are unreinforced masonry buildings and were constructed without knowledge of how these structures performed in earthquakes. Unfortunately, experience now shows **this is one of the most dangerous building types** and evidence of its poor performance in earthquakes throughout the world is well documented.

## How Likely is a “Big One\*”?

Earthquake source	Annual likelihood
Salt Lake City segment of the Wasatch fault	1 in 450 to 1 in 1,600
One of the Wasatch fault’s five central segments (Brigham City to Nephi)	1 in 300 to 1 in 400
One of 30 active faults in the Wasatch Front region	1 in 200

## Reality Check

(compare to the chance of a “Big One”)

Cause of death	Your annual risk
Heart disease	1 in 450
Cancer	1 in 530
Stroke	1 in 2,100
Motor-vehicle accident	1 in 6,500

\*A large surface-faulting earthquake of about magnitude 7

Sources: Likelihood calculated by the University of Utah Seismograph Stations from data provided in UGS, USGS, GeoHaz Consultants and URS Corporation reports.

Source: Centers for Disease Control and Prevention; causes of death in the U.S. in 2005.

## Most earthquake damage is caused by shaking

**The intensity of shaking that a building or structure will experience during an earthquake is highly variable, but generally depends on three main factors:**

- 1** The magnitude of the earthquake—in general, the larger the quake, the stronger the shaking and the larger the area affected.
- 2** The distance from the earthquake—the closer to the source of the earthquake, the greater the shaking.
- 3** The type of ground material beneath the structure—soils may amplify or deamplify the shaking relative to hard bedrock.

Salt Lake City skyline, by Ravell Call, Deseret News.



Shaking may be so violent that you cannot run or crawl. Immediately **DROP** to the ground where you are, before the earthquake drops you!



## ..... During a quake Protect yourself .....

### 1 DROP where you are.

### 2 TAKE COVER by getting under a sturdy desk or table.

- If there isn't a table or desk near you, cover your head and neck with your arms.
- You are much more likely to be injured by falling of flying objects (TVs, lamps, glass, bookcases, etc.) than to die in a collapsed building.

**DO NOT RUN OUTSIDE, GET INTO A DOORWAY OR TRY TO RUN TO ANOTHER ROOM JUST TO GET UNDER A TABLE.**

### 3 HOLD ON. The floor or the ground could jerk strongly sideways or out from under you; **HOLD ON** to something sturdy and stay where you are until the shaking stops.

- When the shaking stops, move carefully.
- Don't run.
- There may be strong aftershocks.
- There could be broken glass and fallen items blocking your exit.
- Before you leave a building, consider the outside surroundings. Move to a clear area away from wires, buildings and anything else that could fall and hurt you.

### IF YOU ARE:

**INDOORS:** Drop, cover and hold on. Drop to the floor, take cover under a sturdy desk or table, and hold on to it firmly. Be prepared to move with it until the shaking stops. If you are not near a desk or table, drop to the floor against an interior wall and protect your head and neck with your arms. Avoid exterior walls, windows, hanging objects, mirrors, tall furniture, large appliances and kitchen cabinets with heavy objects or glass. Do not go outside!

**IN BED:** If you are in bed, hold on and stay there, protecting your head with a pillow. You are less likely to be injured staying where you are. Broken glass on the floor has caused injury to those who have rolled to the floor or tried to get to doorways.

**IN A HIGH-RISE:** Drop, cover and hold on. Avoid windows and other hazards. Do not use elevators. Do not be surprised if sprinkler systems or fire alarms activate.

**OUTDOORS:** Move to a clear area if you can safely do so; avoid power lines, trees, signs, buildings, vehicles and other hazards.

**DRIVING:** Pull over to the side of the road, stop and set the parking brake. Avoid overpasses, bridges, power lines, signs and other hazards. Stay inside the vehicle until the shaking is over. If a power line falls on the car, stay inside until a trained person removes the wire.

**IN A STADIUM OR THEATER:** Stay at your seat and protect your head and neck with your arms. Don't try to leave until the shaking is over. Then walk out slowly watching for anything that could fall in the aftershocks.

### Don't be fooled!

"THE TRIANGLE OF LIFE SURVIVAL METHOD IS THE BEST METHOD TO USE INSIDE A BUILDING TO SURVIVE AN EARTHQUAKE."

### False.

The best survival method inside a building is to **Drop, Cover and Hold On** under a table, desk, or chair, rather than trying to get into a survivable void next to a large, bulky object as advocated by the Triangle of Life method. The **Drop, Cover and Hold On** survival method protects individuals from objects falling from walls and shelves. It also provides a level of protection from structural failures. If a table or desk is not available, sit down with your back against an interior wall, using your hands and arms to protect your head and neck.

**TEST YOUR KNOWLEDGE:** .....  
Visit the interactive feature at  
[www.dropcoverholdon.org](http://www.dropcoverholdon.org)

# ..... After the quake Check for injuries and damage .....

Once earthquake shaking has stopped, check for injuries and damage. When safe, continue to follow your disaster-preparedness plan.

## CHECK FOR INJURIES

- Check yourself for serious injuries before helping others. Protect your mouth, nose and eyes from dust.
- If a person is bleeding, put direct pressure on the wound. Use clean gauze or cloth if available.
- If a person is not breathing, administer rescue breathing.
- If a person has no pulse, begin CPR (cardiopulmonary resuscitation).
- Do not move seriously injured persons, unless they are in immediate danger of further harm.
- Cover injured persons with blankets or additional clothing to keep them warm.



This porch on a wood-frame house failed during the 1989 magnitude 6.9 Loma Prieta earthquake. The "red tag" indicates that this home is unsafe and must not be entered or occupied. (Photo courtesy of USGS)



## CHECK FOR DAMAGE-CAUSING HAZARDOUS CONDITIONS



**FIRE:** If possible, put out small fires in your home or neighborhood immediately. Call for help, but don't wait for the fire department.

**GAS LEAKS:** Turn off the gas only if you suspect a leak because of broken pipes or you detect the odor or sound of leaking natural gas. Use a manual gas shut-off wrench to close your main gas valve by turning it counter-clockwise. Don't turn gas back on by yourself—wait for the gas company! (Your telephone book has information on this topic.)



*If you suspect a gas leak, use a manual gas shut-off wrench.*

**DAMAGED ELECTRICAL WIRING:** Shut off power at the main breaker switch if there is any damage to your home wiring. Leave the power off until the damage is repaired! (Your telephone book also has information on this topic.)

**DOWNED UTILITY LINES:** If you see downed power lines, consider them energized and keep yourself and others well away from them. Never touch downed power lines or any objects in contact with them!

**FALLING ITEMS:** Beware of heavy items tumbling off shelves when you open closet and cupboard doors.

**SPILLS:** Use extreme caution; when in doubt about the safety of the situation, leave. Spilled medicines, drugs or other relatively nontoxic substances can be cleaned up safely. Potentially harmful materials, such as bleach, lye, garden chemicals, paint and gasoline or other flammable liquids should be isolated or covered with an absorbent material, such as dirt or cat litter.

**DAMAGED MASONRY:** Stay away from brick chimneys and walls. They may be weakened and could topple during aftershocks. Don't use a fireplace with a damaged chimney, it could start a fire or trap toxic gases in your home.

## IF YOUR HOME IS SERIOUSLY DAMAGED

If your home is structurally unsafe or threatened by a fire or other secondary disaster, you need to evacuate. However, shelters may be overcrowded and initially lack basic services, so do not leave home just because utilities are out of service or your home and its contents have suffered only moderate damage. If you evacuate, tell a neighbor and your family point-of-contact where you are going.

### BRING TO A SHELTER:

- ☐ Personal emergency kits
- ☐ Supply of water, food and snacks.
- ☐ Blanket, pillow and air mattress or sleeping pad.
- ☐ Change of clothing and a jacket.
- ☐ Towel and washcloth.
- ☐ Diapers, formula, food and other supplies for infants.
- ☐ A few family pictures or other small comfort items, such as dolls or teddy bears for children.
- ☐ Personal identification and copies of household and health insurance information.
- ☐ Books and games (especially for children).

### HOWEVER, DO NOT BRING:

Pets (service animals for people with disabilities are allowed—bring food for them).

Large quantities of unnecessary clothing or other personal items.

Valuables that might be lost or stolen.



## CAN YOU LIVE WITHOUT THE SERVICES YOU RELY ON?

- Water may be in short supply.
- Natural gas and electric power may be out for days or weeks.
- Garbage and sewage services may be interrupted.
- Telephone, Internet, cell phone and wireless communications may be overloaded or unavailable.
- Mail service may be disrupted or delayed.
- Gasoline may be in short supply and rationing may be necessary.



- Bank operations may be disrupted, limiting access to cash, ATMs or online banking.
- Grocery, drug and other retail stores may be closed or unable to restock shelves.

## WILL YOU HAVE MEDICAL SERVICES?

- The 9-1-1 emergency system will likely be overloaded.
- Hospitals and other medical facilities may be damaged.
- Emergency rooms and trauma centers may be overwhelmed.
- Assisted living, critical care and other health services such as dialysis may not be operational.

## WILL YOU BE ABLE TO GET HOME?

- Road damage and closures may restrict your ability to travel by car.
- Public transportation, including buses, TRAX, trains and airports may experience closures or interruptions in service.
- Commute times may increase dramatically.

# After the quake

Once you have met your and your family's immediate needs, continue to follow your disaster-preparedness plans.

## The first days after the quake

In the days following a damaging quake, pay special attention to the following:

### Safety first

- Do not re-enter your home until you know it is safe.
- Be sure there are no gas leaks in your home before using open flames (lighters, matches, candles or grills) or operating any electrical or mechanical device that could create a spark (light switches, generators, chain saws or motor vehicles).
- Check for chemical spills, faulty electrical wiring and broken water lines. Water in contact with faulty wiring is a shock hazard.
- Unplug broken or toppled light fixtures or appliances. These could start fires when electricity is restored.
- Never use the following indoors: camp stoves, kerosene or gas lanterns or heaters, gas or charcoal grills or gas generators. These can release deadly carbon monoxide gas or be a fire hazard in aftershocks.

### Be in communication

- Turn on your portable or car radio and listen for information and safety advisories.
- Place all phones back on their cradles.
- Call your out-of-area contact, tell them your status and then stay off the phone. Emergency responders need the phone lines for life-saving communications.
- Check on your neighbors.

# Be informed

## Check your food and water supplies

- If power is off, plan meals so as to use up refrigerated and frozen foods first. If you keep the door closed, food in your freezer may be good for a couple of days.
- If your water is off, you can drink from water heaters, melted ice cubes or canned vegetables. Avoid drinking the water from swimming pools or hot tubs; use it to fight fires.

## The first weeks after the earthquake

- This is a time of transition. Although aftershocks may continue, you will now work toward getting your life, your home, family and your routines back in order. Emotional care and recovery are just as important as healing physical injuries and rebuilding a home. Make sure your home is safe to occupy and not in danger of collapse in aftershocks. If you were able to remain in your home or return to it after a few days, you will have a variety of tasks to accomplish while re-establishing routines:

### Tasks

- If your gas was turned off, you will need to arrange for the gas company to turn it back on.
- If the electricity went off and then came back on, check your appliances and electronic equipment for damage.
- If water lines broke, look for water damage.
- Locate or replace critical documents that may have been misplaced, damaged, or destroyed.
- Contact your insurance agent or company to begin your claims process.
- Contact the Federal Emergency Management Agency (FEMA) to find out about financial assistance.

## If you can't stay in your home

The American Red Cross offers immediate emergency assistance with housing needs. The Red Cross also supports shelter operations prior to a presidential declaration of a federal disaster.

# Aid may not be available immediately following a major disaster. Without proper planning, the financial impact of an earthquake on you and your family could be devastating.



YOUR

## FINANCIAL DISASTER RECOVERY KIT

Keep these items together, current and stored in a fire-proof document safe. Consider purchasing a home safe or renting a safe deposit box. Some essential items:

- ☐ Birth certificates.
- ☐ Marriage license/divorce papers and child custody papers.
- ☐ Passports and driver's licenses.
- ☐ Social security cards.
- ☐ Naturalization papers and residency documents.
- ☐ Military/veteran's papers.
- ☐ Critical medical information.
- ☐ Cash, in the event ATM or bank services are disrupted.
- ☐ Certificates for stocks, bonds and other investments.
- ☐ Bank statements.
- ☐ Credit card numbers.
- ☐ A list of phone numbers for financial institutions and credit card companies where you have accounts.
- ☐ Insurance policies.
- ☐ An inventory of your household possessions.
- ☐ Appraisals of valuable jewelry, art, antiques and heirlooms.
- ☐ Home improvement records.
- ☐ A backup of critical files on your computer (also keep a copy at work).
- ☐ A list of names, phone numbers and e-mail addresses of critical personal and business contacts.
- ☐ Deeds, titles, and other ownership records for property such as homes, autos, RVs and boats.
- ☐ Powers of attorney, including healthcare powers of attorney.
- ☐ Wills or trust documents.

Although many things are out of your control after a quake, your ability to recover financially depends on a number of factors that you can control. Prepare and follow a financial disaster recovery plan and you will be more likely to recover successfully.

## CONSIDER THE FOLLOWING:

### Will you have money, food and medicine?

- Bank operations may be disrupted, limiting access to cash, ATMs or online banking.
- Food, drug and other retail stores where you shop may be closed or unable to restock shelves.

### Will you be able to recover financially?

- You are still responsible for your existing debts, such as mortgage, lease, car and credit-card payments.
- You may not have access to important financial records.
- Your assets are at risk without sufficient earthquake insurance.
- If you have earthquake insurance and experience loss, begin working with your insurer to file a claim as quickly as possible.

### Will your insurance cover your losses?

- Homeowner's and renter's insurance policies do not cover losses related to earthquakes.
- A separate earthquake insurance policy is one way to help protect your home, in addition to seismic retrofitting.
- Earthquake insurance also helps with additional living expenses in the days and weeks after earthquakes.
- Relatively few Utah homeowners have earthquake insurance.



This bank was damaged in the Nisqually, Washington earthquake (Photo courtesy of The Olympian, Olympia, Wash.)



## Don't be fooled!

"I DON'T NEED TO WORRY ABOUT EARTHQUAKES—THE GOVERNMENT WILL SAVE ME!"

### False.

Many people wrongly believe that the U.S. government will take care of all their financial needs if they suffer losses in an earthquake. The truth is that federal disaster assistance is only available if the president formally declares a disaster. Even if you do get disaster assistance, it is usually a loan that you must repay, with interest, in addition to mortgages and other financial obligations you still owe, even on damaged property. If you don't qualify for loans, grants may be available to you. However, these are only designed to meet your most immediate needs, not to replace your losses.



Electricity, water, transportation and other vital systems can be disrupted for several days or more after a large earthquake. Emergency response agencies will likely be overwhelmed and unable to provide you with immediate assistance.

## Be prepared

Everyone in your family should have a **personal disaster kit** stored in an easy-to-grab location. Pack the supplies in a backpack or small bag that can be easily carried in the event of an evacuation.



Store this **household disaster kit** inside a large portable watertight container in a safe, accessible location. Pack at least a 3- to 5-day supply of these items:

### PERSONAL DISASTER KITS

### HOUSEHOLD DISASTER KIT

#### PACKING TIPS

**Distribute heavy items equally between family member's kits.**



**Keep a light source in the top of your kit, so you can find it quickly in the dark.**

- Medications, a list of prescriptions, copies of medical insurance cards, doctors' names and contact information
- Medical consent forms for dependents
- First aid kit and handbook
- Spare eyeglasses, personal hygiene supplies and sturdy shoes
- Bottled water
- Whistle (to alert rescuers to your location)
- Emergency cash
- Personal identification
- List of emergency contact phone numbers
- Snack foods high in calories
- Emergency lighting: light sticks and/or a working flashlight with extra batteries and light bulbs (hand-powered flashlights are also available)
- Comfort items such as games, crayons, writing materials and teddy bears

- Drinking water (minimum one gallon per person per day)
- First aid supplies, medications, and essential hygiene items such as soap, toothpaste and toilet paper
- Emergency lighting: light sticks and/or a working flashlight with extra batteries and light bulbs (hand-powered flashlights are also available)
- A hand-cranked or battery-operated radio and spare batteries
- Canned and packaged foods and cooking utensils, including a manual can opener
- Items to protect you from the elements, such as warm clothing, sturdy shoes, extra socks, blankets and perhaps even a tent
- Heavy-duty plastic garbage bags for waste and to serve other uses, such as tarps and rain ponchos
- Work gloves and protective goggles
- Pet food and pet restraints
- Copies of vital documents, such as insurance policies and personal identification



Enclose extra clothing, matches, personal documents and other items that could be damaged by smoke or water in plastic to protect them.

#### A special note about children

In the days after a quake, kids need extra contact and support. They may be frightened and under great stress – and aftershocks won't let them forget the experience. Parents may have to leave children with others in order to deal with the emergency and this can be scary. Whenever possible, include your children in the earthquake recovery process.

**Resources for kids to learn about disaster preparedness:**

[www.fema.gov/kids/](http://www.fema.gov/kids/)  
[earthquake.usgs.gov/4kids/](http://earthquake.usgs.gov/4kids/)

**Note: Replace perishable items like water, food, medications and batteries on a yearly basis. Check children's clothing for proper fit. Adjust clothing for winter or summer needs.**





The Disaster Crew

For more activities from the Disaster Crew, visit [beready.utah.gov](http://beready.utah.gov), choose the topic: **Children & Disasters**, then look for the link at the bottom for **Kids Activity Book**.



After an earthquake, knowing more about what just happened can reduce fears and help you understand what to expect next.

LEARN MORE

### Location and magnitude of recent earthquakes

Within 1 to 2 minutes of an earthquake, its location and magnitude are available at several Websites, including:

[quake.utah.edu/](http://quake.utah.edu/)  
[earthquake.usgs.gov/](http://earthquake.usgs.gov/)

### "ShakeMap"

Within 5 to 10 minutes of most felt earthquakes (magnitude 3.0 and greater in the Wasatch Front area), a "ShakeMap" is posted on the Web. This map shows the range of shaking intensities across a region.

[quake.utah.edu/shake/](http://quake.utah.edu/shake/)  
[earthquake.usgs.gov/eqcenter/shakemap/](http://earthquake.usgs.gov/eqcenter/shakemap/)

### "Did you feel it" – Tell us what you felt!

Personal experiences of the effects of an earthquake are very valuable to scientists. When you have felt a quake, please report your observations by using a quick survey found on the U.S. Geological Survey "Did You Feel It?" Website at:

[earthquake.usgs.gov/dyfi/](http://earthquake.usgs.gov/dyfi/)

### Who monitors Utah's earthquakes?

Seismic monitoring in the Utah region is conducted by the University of Utah Seismograph Stations in partnership with the U.S. Geological Survey as part of the Advanced National Seismic System.

[quake.utah.edu/](http://quake.utah.edu/)  
[earthquake.usgs.gov/research/monitoring/anss/](http://earthquake.usgs.gov/research/monitoring/anss/)

## PLANNING YOUR OWN DISASTER SUPPLIES KIT

### activity

The Disaster Crew made kits for each of their families. Now you can make a kit for your own family by completing the worksheet below.

- How many people are in your family? \_\_\_\_\_
- Water:** You need a 3-day supply. Each person needs 1 gallon per day. How many gallons will your family need?  
\_\_\_\_\_ people X 3 = \_\_\_\_\_ gallons of water.
- Food:** You need a 3-day supply of canned foods. List some foods you might put in your supply kit:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Medicine and supplies for your First Aid kit:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- How will you listen to the news for weather updates and official instructions?  
\_\_\_\_\_  
\_\_\_\_\_
- If the power goes out, what will you use to see in the dark?  
\_\_\_\_\_  
\_\_\_\_\_
- What will you need to open cans of food?  
\_\_\_\_\_  
\_\_\_\_\_

## Credits

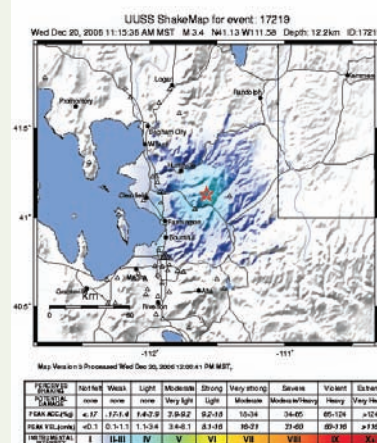
This educational section from the *Deseret News' Newspapers in Education* program was designed by Lou Ann Reineke with assistance from Joe Dougherty, Public Information Officer at Utah Division of Emergency Management, Ryan Longman, Program Manager of BeReady Utah. The project was under the direction of Cindy Richards, Newspapers in Education director, with special thanks to Dean Hale and Sarah Knight, Emergency Essentials LLC.

Additional copies of this Deseret News educational section on The Great Utah ShakeOut are available at all Emergency Essentials store locations: Bountiful, Murray, South Jordan and Orem. Visit [Beprepared.com/Stores](http://Beprepared.com/Stores) for hours or call 1-800-999-1863.



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## Earthquake information on the Web



"ShakeMap" for the Dec. 2006 quake near Kaysville, Utah.

Activity answers may include: 3) Canned tuna, soup, beans, fruit and vegetables. 4) Bandages, aspirin, germ-free alcohol pads, antibiotic cream, sunscreen, thermometer, burn cream, medicine, band aids. 5) Radio that runs on batteries. Question 7) Can opener that turns by hand.





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